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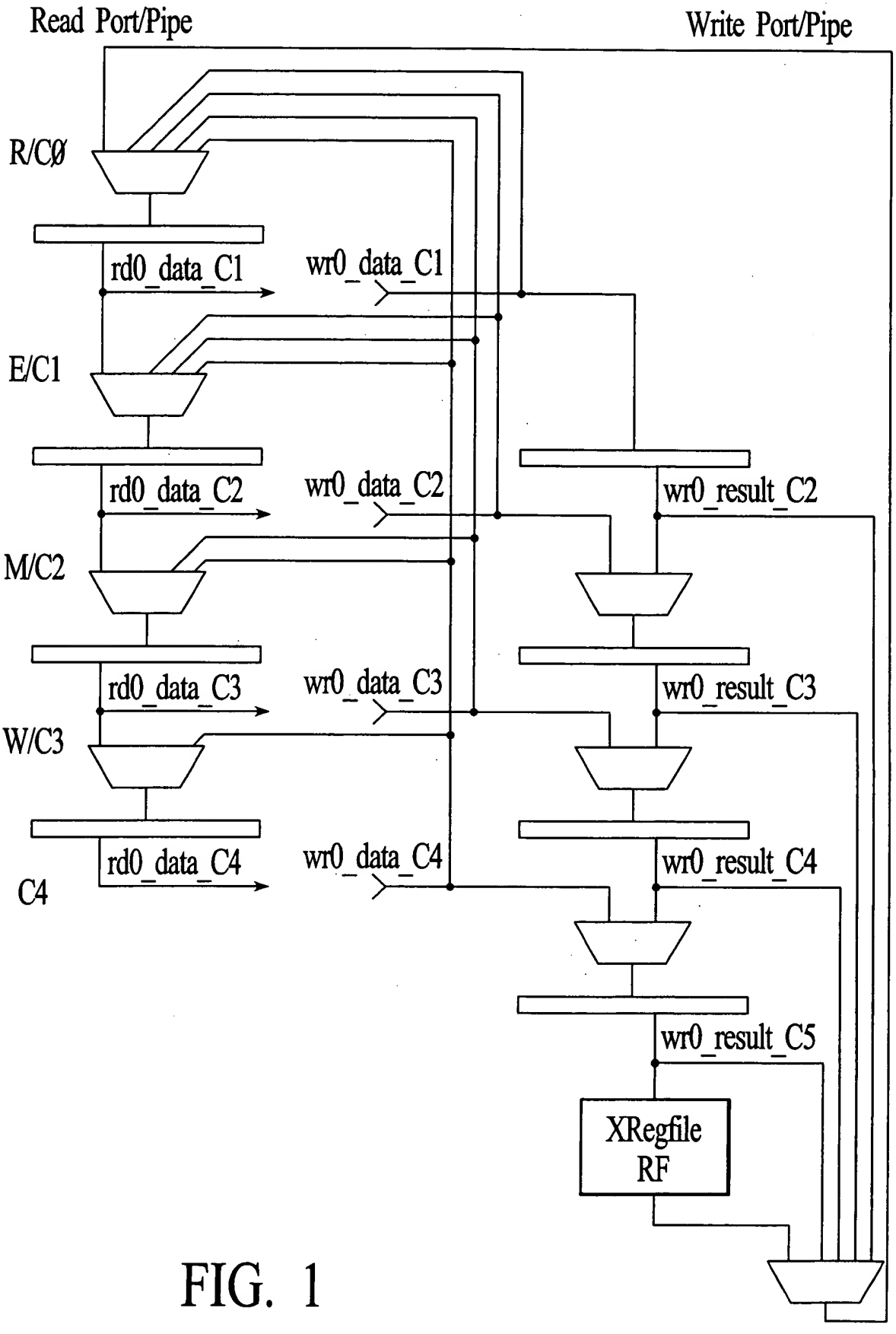

FIG. 1

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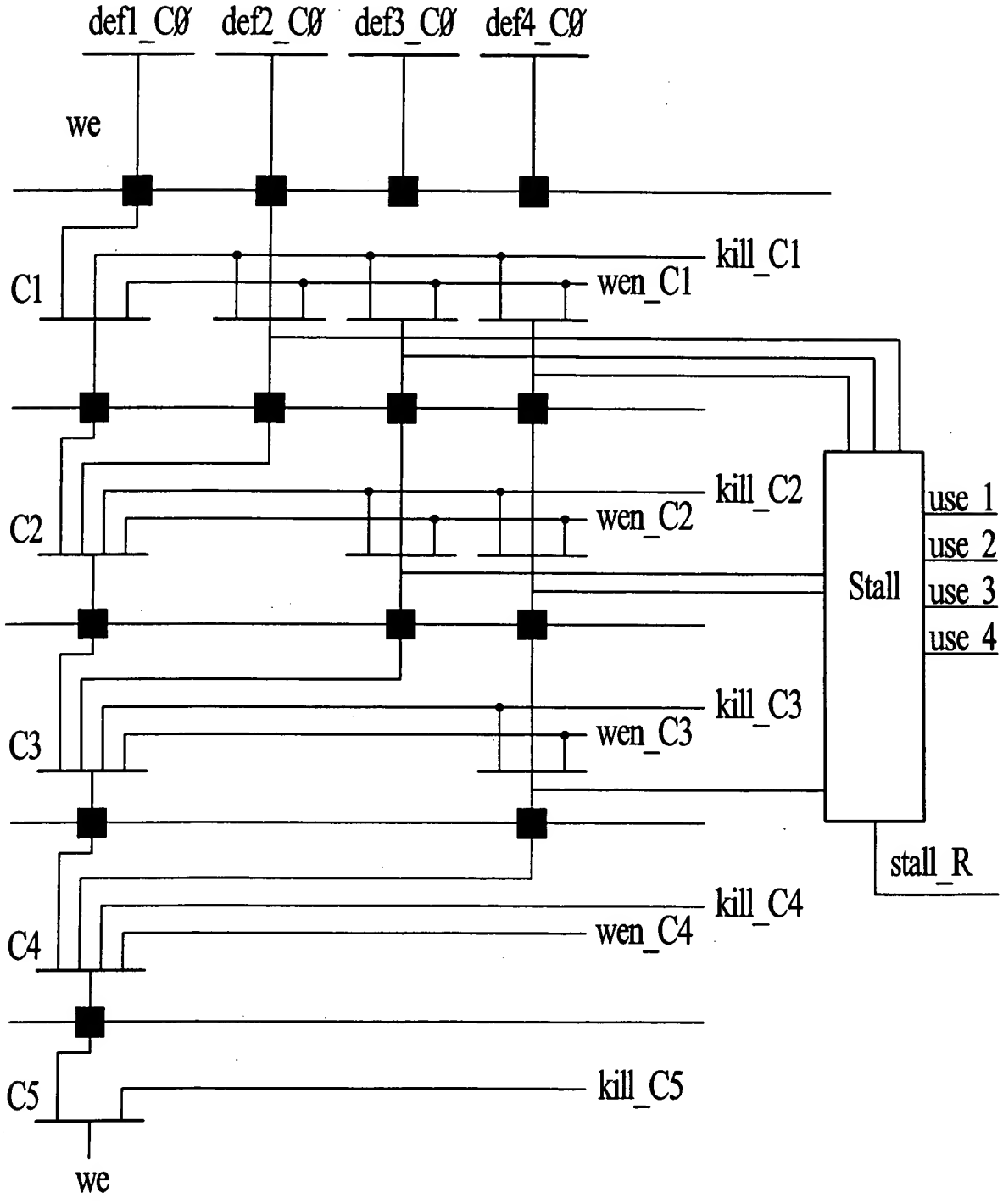

FIG. 2

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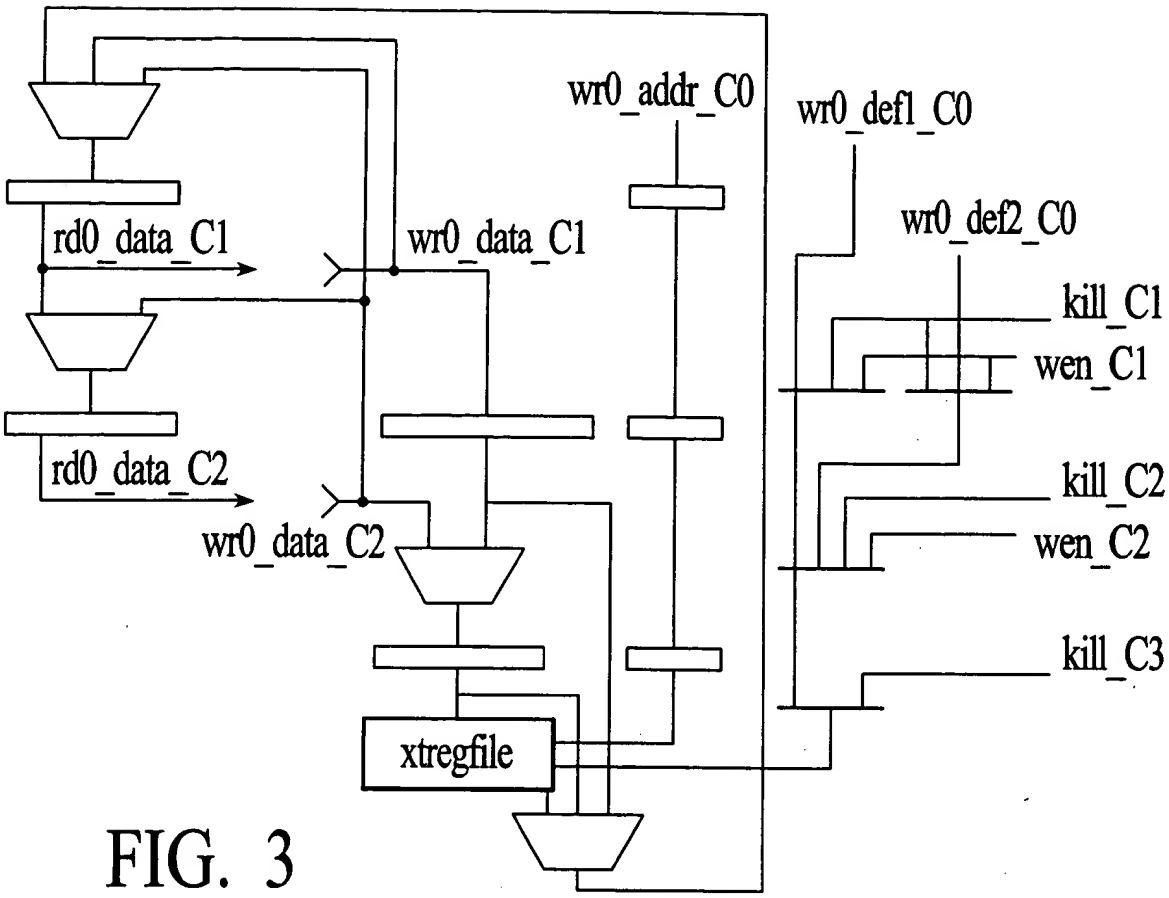

FIG. 3

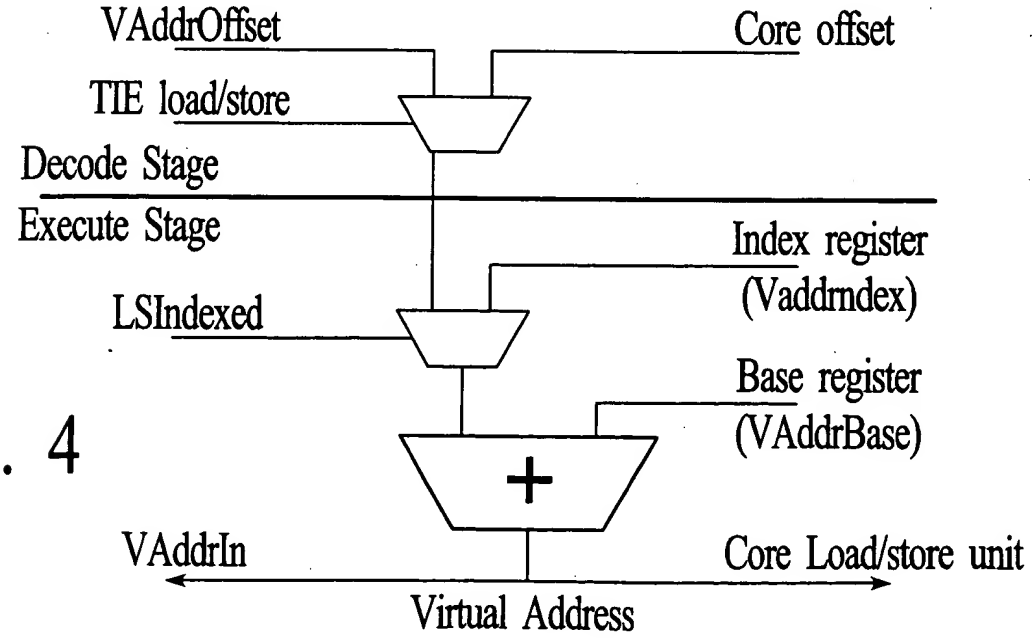

FIG. 4

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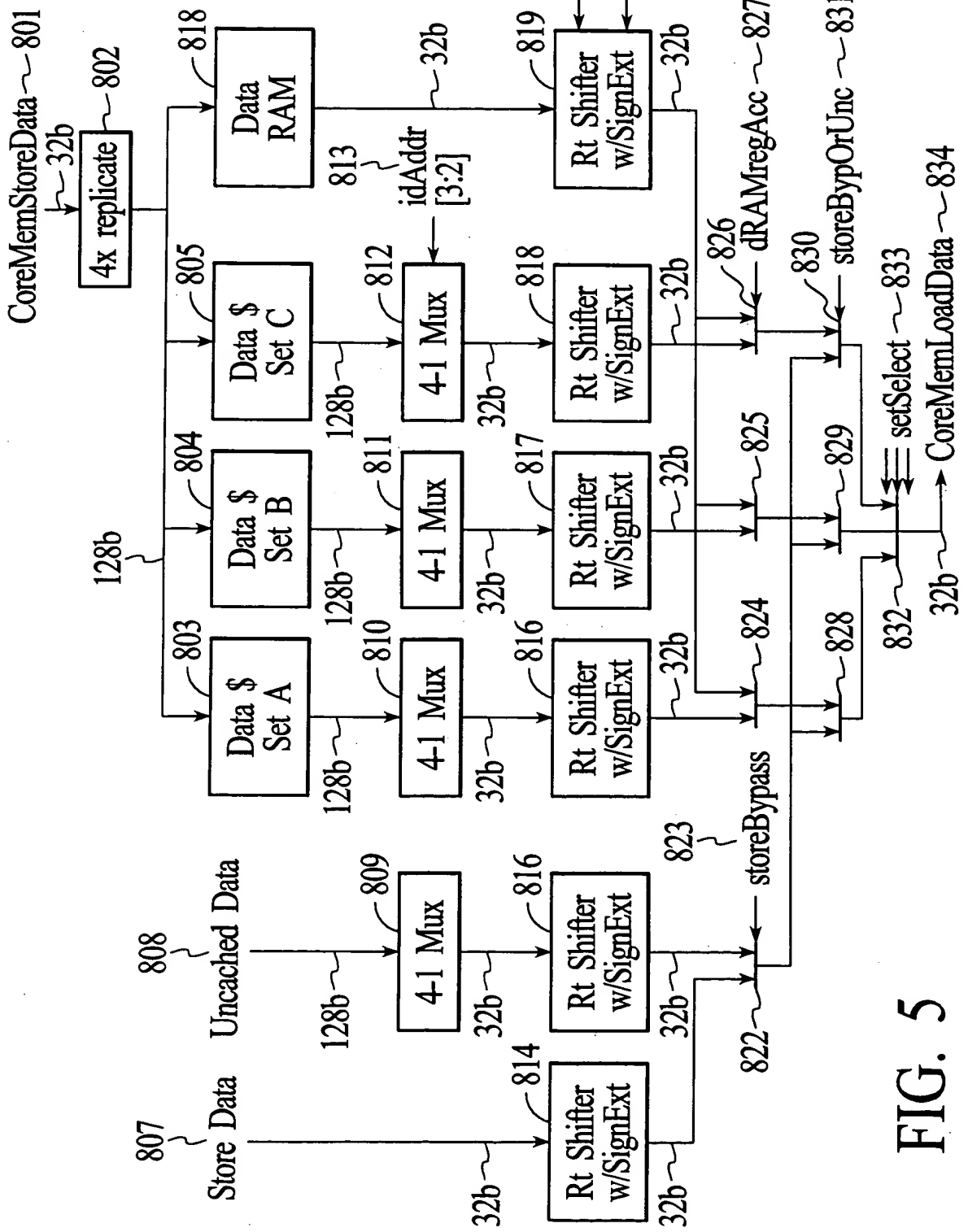

FIG. 5

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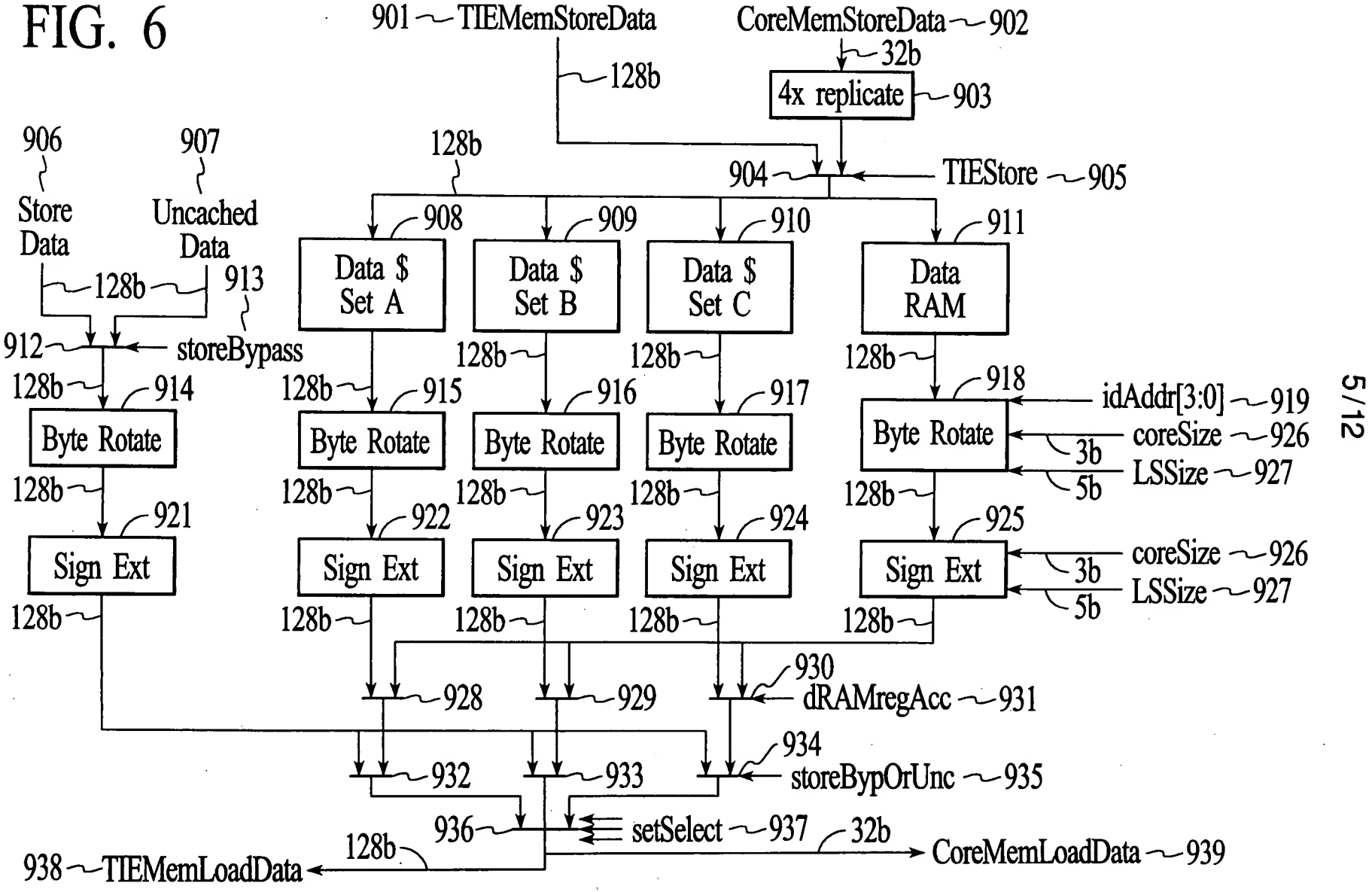
FIG. 6



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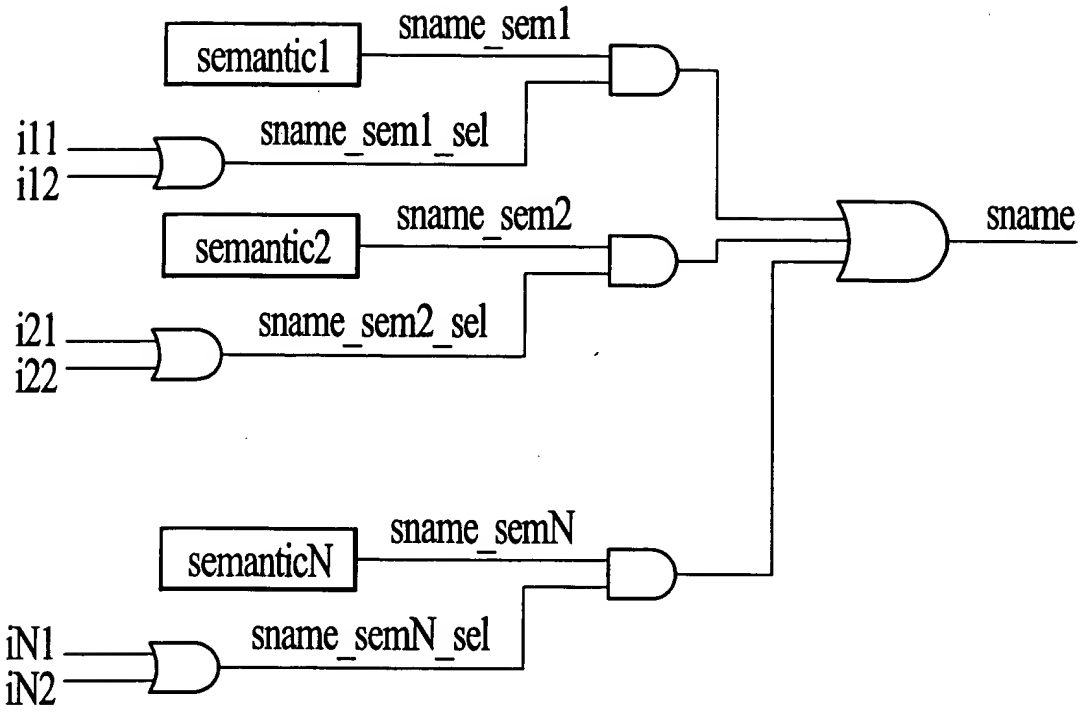

FIG. 7

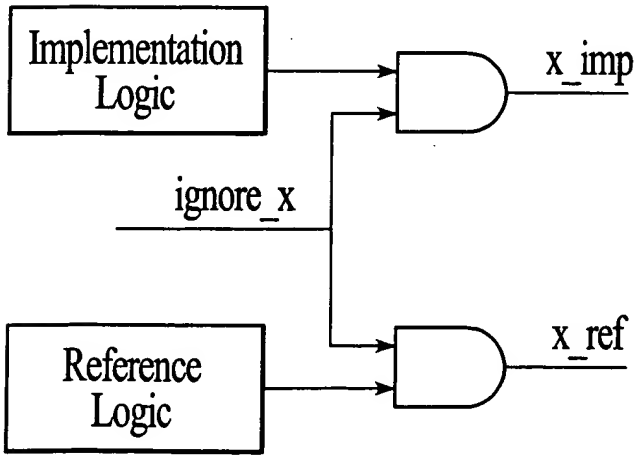

FIG. 11

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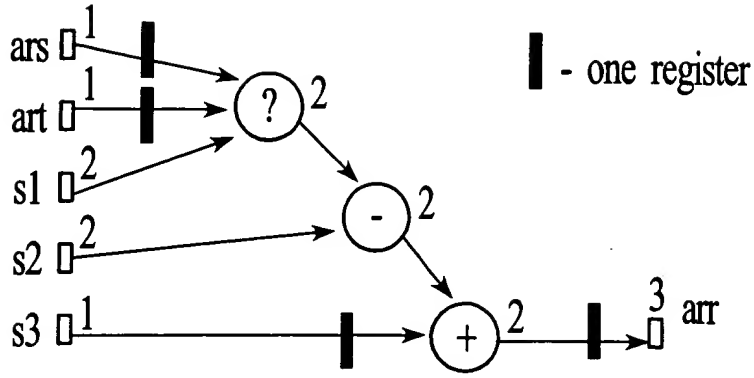

FIG. 8A

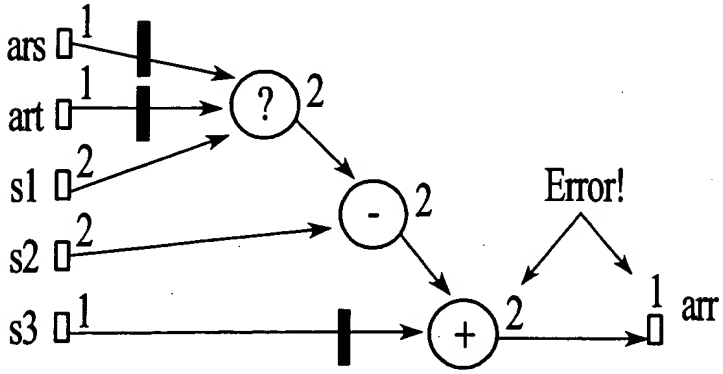

FIG. 8B

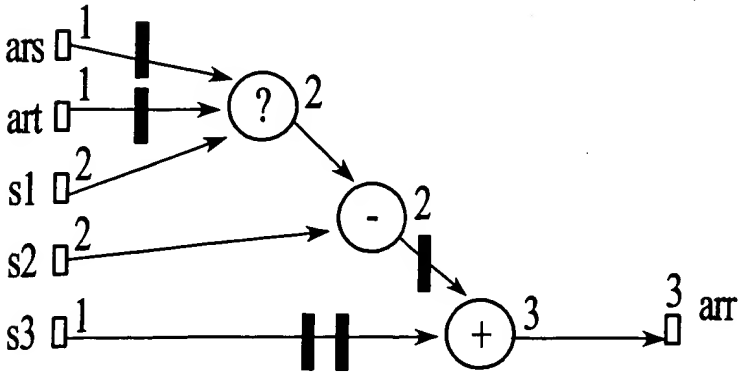

FIG. 8C

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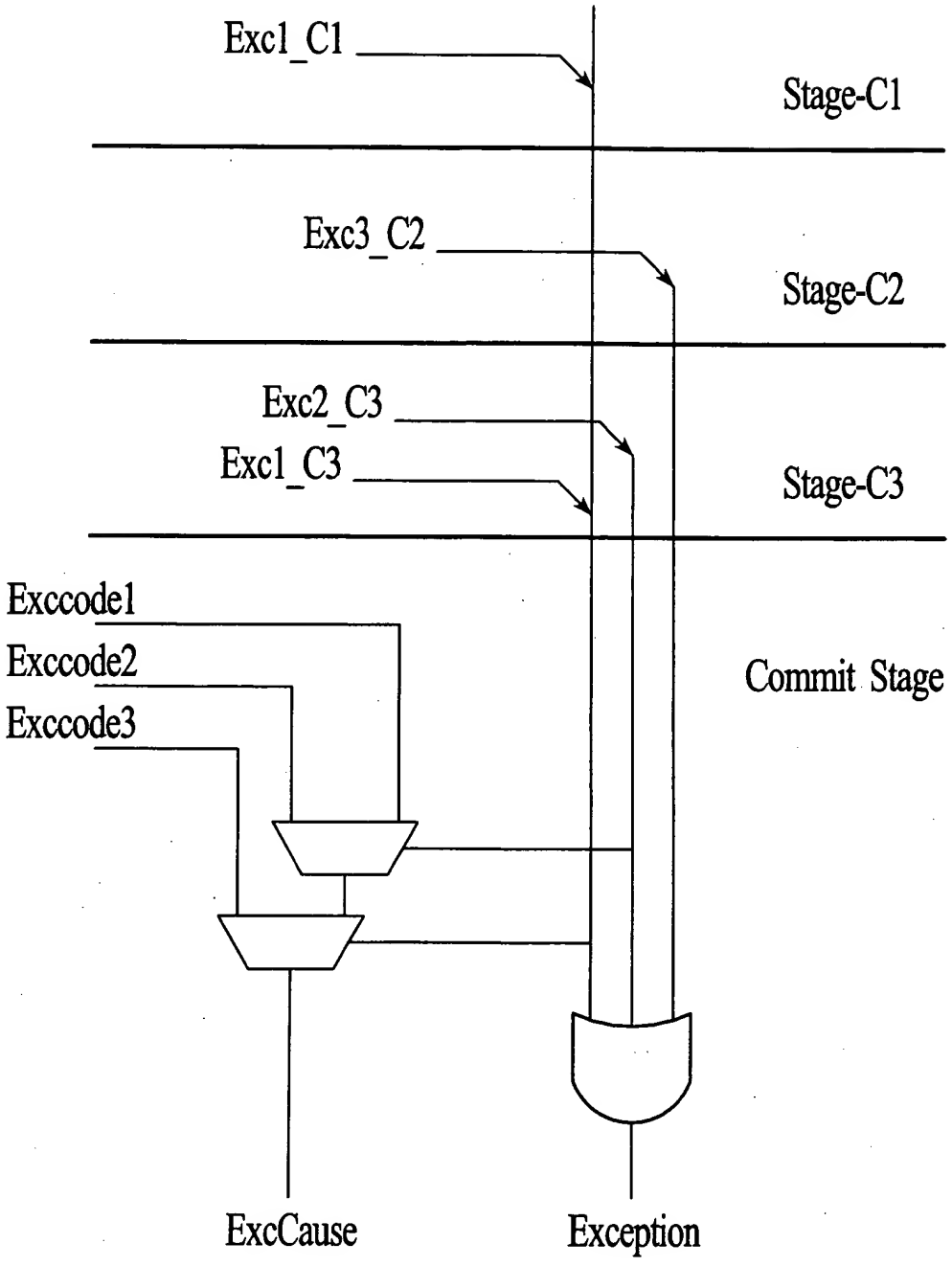

FIG. 9

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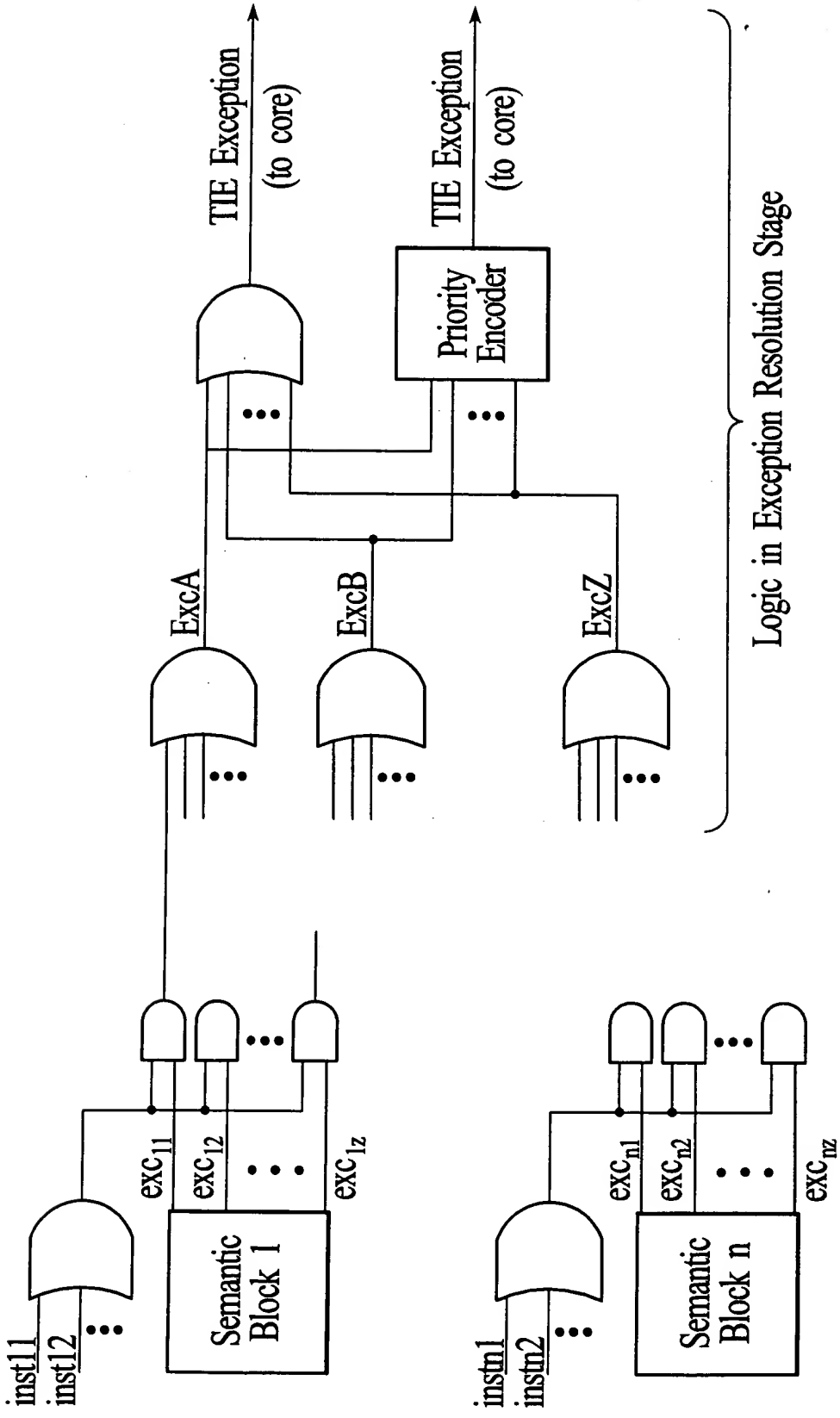

FIG. 10

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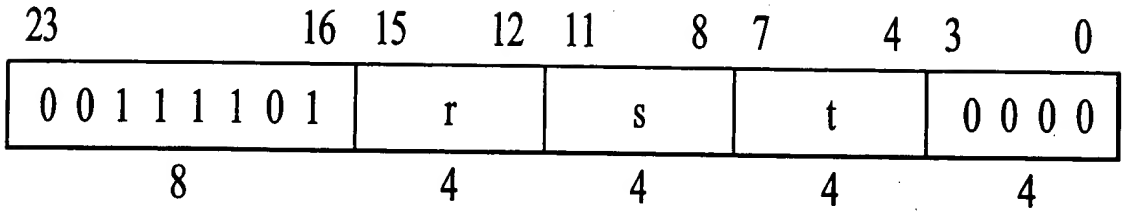
MAX40 4 Parallel 40-bit Maximum

Instruction Word



Package

Vector Integer Coprocessor

Assembler Syntax

MAX40 vr, vs, vt

Description

MAX40 calculates the 40-bit two's complement maximum value for each of the 4 elements of vector registers vs and vt. The result elements are written to vector register vr.

Operation

```
vr = {(({~vs[159], vs[158:120]}) < ({~vt[159], vt[158:120]})) ?
vt[159:120] : vs[159:120], (({~vs[119], vs[118:80]}) < ({~vt[119],
vt[118:80]})) ? vt[119:80} : vs[119:80], (({~vs[79], vs[78:40]}) <
({~vt[79], vt[78:40]})) ? vt[79:40] : vs[79:40], (({~vs[39],
vs[38:0]}) < ({~vt[39], vt[38:0]})) ? vt[39:0] : vs[39:0]};
```

Exceptions

None

FIG. 12

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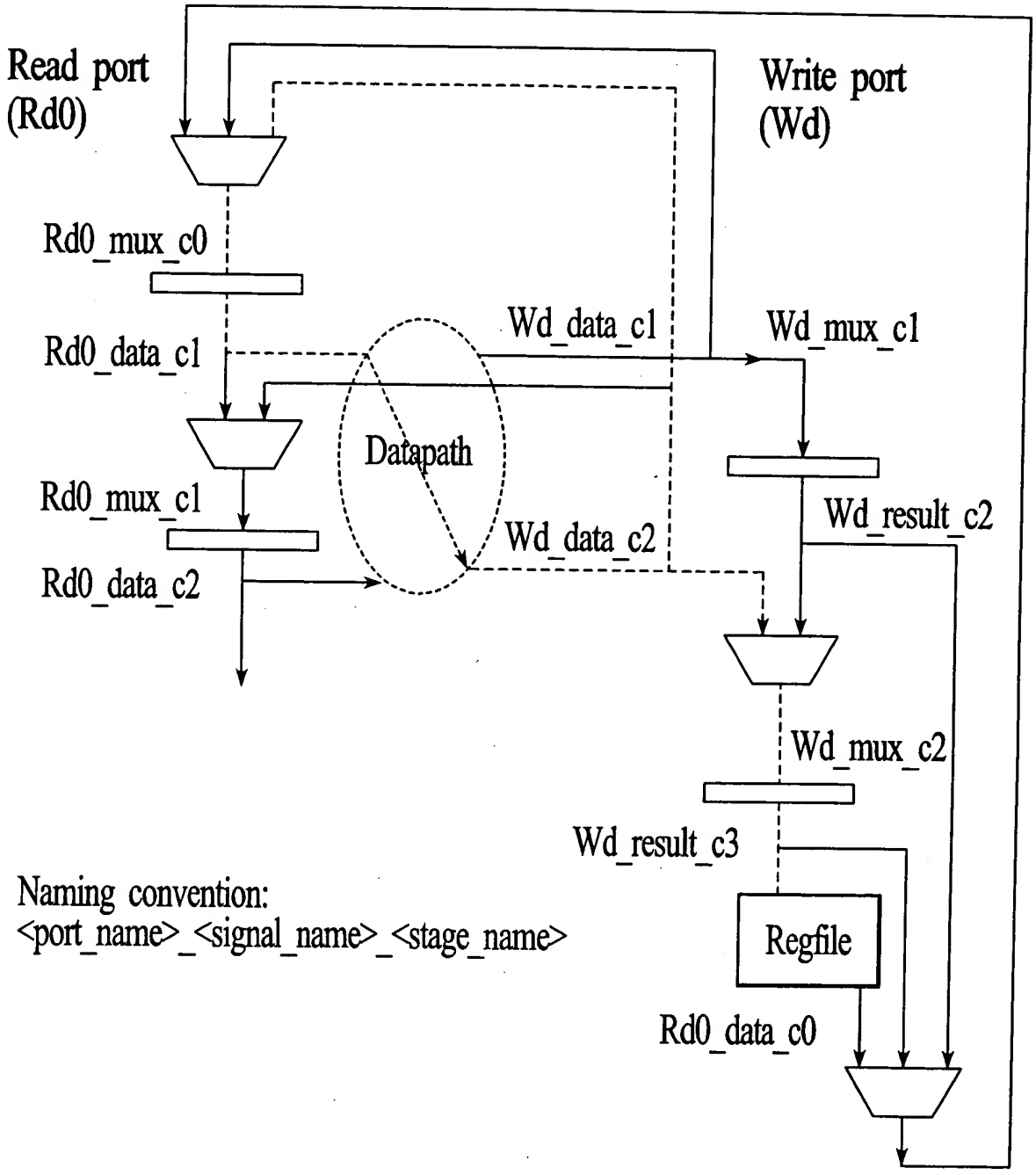

FIG. 13

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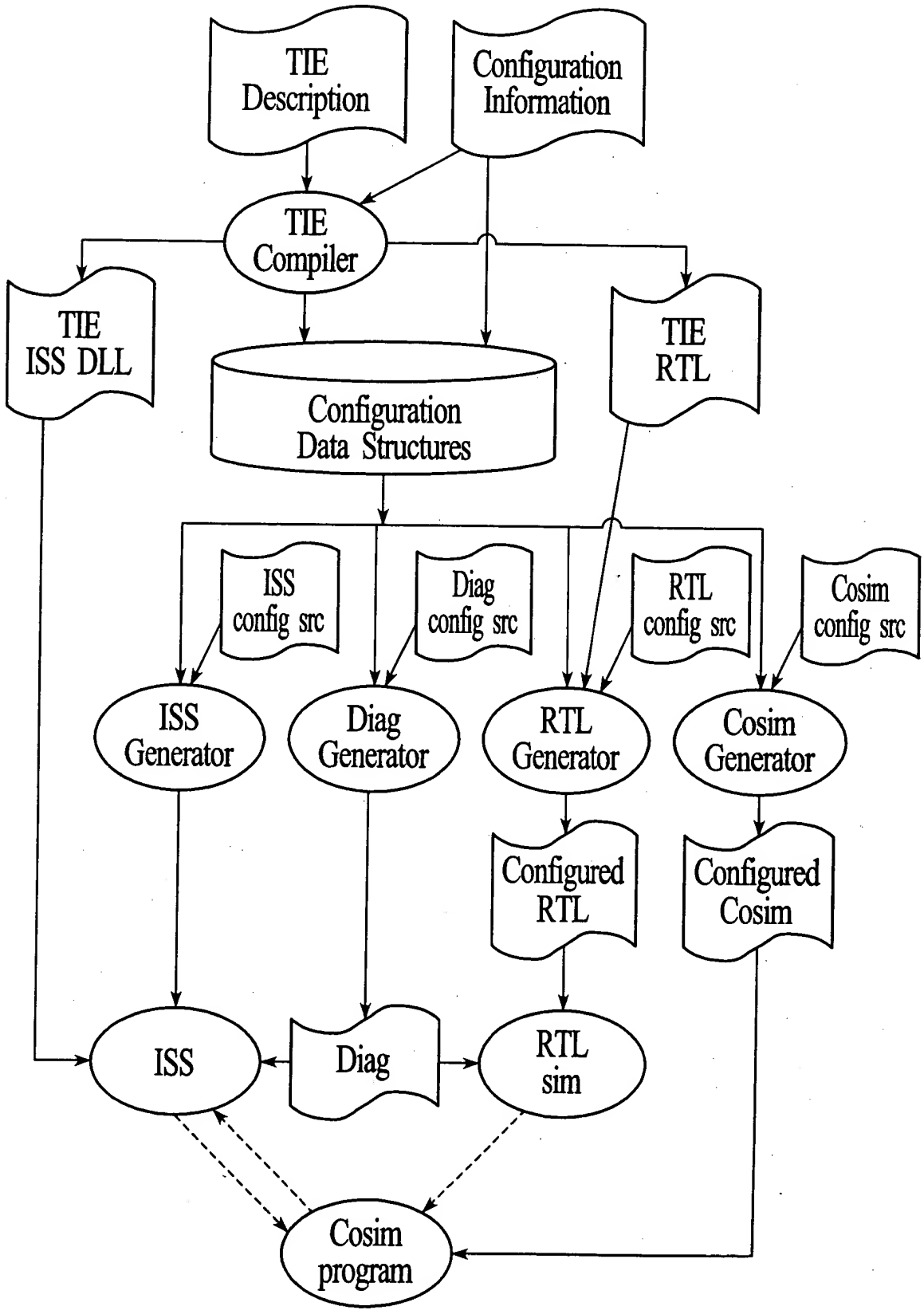

FIG. 14